

Russellville Fire Department Central Station

Russellville, Arkansas

Architect

Jackson Brown Palculict Architects, Inc.

The new Central Fire Station is a command center for the Russellville Fire Department. Complying with the City of Russellville's downtown master plan and designed to context of the downtown historic buildings, the new station is a three-story complex on a zero-lot line site, taking full advantage of the buildable site.

The new station will serve to stitch the downtown fabric of the city back together after years of sprawl and disuse. New sidewalks and streetscaping connect the site to Arkansas Tech University in the north and a bustling downtown to the south and east. The building's architecture extends to the property line on the north, south, and east sides, emphasizing the city block and giving a street edge to pedestrians.

Functions of the building are divided by floors and connected through stairs, an elevator, and fire poles. The layout was designed to reduce response times and minimize tracking contaminants into the living and working environment.

The first floor contains a main apparatus and auxiliary apparatus, with a large training room and offices in between. The second floor is living space for the firefighters, with bunk rooms, a day room, kitchen, gym, and small exterior patio. The third floor serves the administration and is comprised of offices, a large co-working space, a conference room, and storage. There is a large outdoor area located on the third floor, which functions as a green space for the living quarters and the offices. Because the site was so restrictive and the building expands to the edges of the property line, this exterior patio was important as a space to allow the firefighters to decompress.

Extensive façade studies were completed on the downtown fabric of Russellville, and the lessons and proportions learned in those studies were applied to the new station. The exterior of the building is a combination of masonry and architectural composite metal panel dividing up the massing, and windows allowing natural light into the living spaces. The building stands as a modern interpretation of the existing historic buildings in the area.

Building security was a major consideration during the design process, and the facility is equipped with cameras and access control to ensure safety of the residents and workers.

The Central Fire Station for Russellville, Arkansas will be a modern upgrade and expansion to the local fire department, ensuring proper facilities to protect the City's residents.



The Russellville Fire Station is a modern interpretation of the existing buildings in the area.



The front desk welcomes Russellville's residents.



The large main and auxiliary apparatus bays.

Photos Courtesy of Sittler & Henry Photography

Architect

Jackson Brown Palculict Architects, Inc.
12921 Cantrell Road, #201, Little Rock, AR 72223
www.jbparchitects.com

Project Team

Structural Engineer

Engineering Consultants, Inc.
401 W. Capitol, #305, Little Rock, AR 72201

Mechanical Engineer

ISGI
136 Apple Blossom Loop, Maumelle, AR 72113

Electrical Engineer

Lucas, Merriott & Associates
2225 W. 7th Street, Little Rock, AR 72201

Civil Engineer & Landscape Architect

Crafton Tull Associates
10825 Financial Center Parkway, #300, Little Rock, AR 72211

General Contractor

Van Horn Construction, Inc.
790 Tyler Road, Russellville, AR 72802

Project General Description

Location: Russellville, Arkansas

Date Bid: Mar 2016

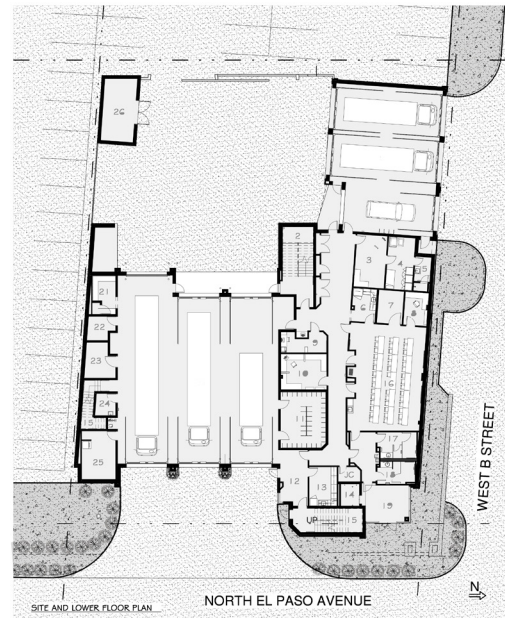
Construction Period: Jun 2016 to Dec 2017

Total Square Feet: 24,849 **Site:** .047 acres.

Number of Buildings: One.

Building Sizes: First floor, 11,194; second floor, 6,857; third floor, 5,767; mezzanine, 1,031; total, 24,849 square feet.

Building Height: First floor, 15'; second floor, 14'; third floor, 14'; rappel level, 12' total, 55'.
Basic Construction Type: New/II B/Sprinklered.
Foundation: Cast-in-place, pier & grade beam, slab-on-grade.
Exterior Walls: CMU, brick, curtain wall, storefront.
Roof: Membrane, metal. **Floors:** Concrete.
Interior Walls: CMU, metal stud drywall.



DIVISION	COST	% OF COST	SQ.FT. COST	SPECIFICATIONS
PROCUREMENT & CONTRACTING REQUIREMENTS	188,644	3.43	7.59	—
GENERAL REQUIREMENTS	323,769	5.88	13.03	—
CONCRETE	292,375	5.31	11.77	Forming & accessories, reinforcing, cast-in-place, precast, case decks & under layment, grouting.
MASONRY	472,013	8.58	19.00	Unit, stone assemblies.
METALS	627,545	11.40	25.25	Structural metal framing, joists, decking, cold-formed metal framing.
WOOD, PLASTICS & COMPOSITES	161,982	2.94	6.52	Rough carpentry, finish carpentry, architectural woodwork.
THERMAL & MOISTURE PROTECTION	601,903	10.94	24.22	Dampproofing & waterproofing, weather barriers, roofing & siding panels, membrane roofing, flashing & sheet metal, roof & wall specialties & accessories, fire & smoke protection, joint protection.
OPENINGS	345,746	6.28	13.91	Doors & frames, specialty doors & frames, entrances, storefronts & curtain wall, windows, hardware, glazing.
FINISHES	667,456	12.13	26.86	Plaster & gypsum board, tiling, ceilings, flooring, wall finishes, acoustic treatment, painting & coating.
SPECIALTIES	101,835	1.85	4.10	Fire extinguishers & cabinets, ship ladders, signage, toilet accessories, chalk & tack boards, miscellaneous.
EQUIPMENT	19,027	0.35	0.77	Food service, miscellaneous.
FURNISHINGS	8,394	0.15	0.34	Window treatment.
CONVEYING SYSTEMS	92,424	1.68	3.72	Elevator (1 passenger).
FIRE SUPPRESSION	85,789	1.56	3.45	Water-based fire-suppression.
PLUMBING	257,169	4.67	10.35	Piping & pumps, equipment, fixtures.
HVAC	599,046	10.89	24.11	Air distribution, central heating equipment, central cooling equipment, central HVAC equipment.
ELECTRICAL	657,872	11.96	26.47	Low-voltage transmission, lighting.
TOTAL BUILDING COSTS	5,502,989	100%	\$221.46	
EXISTING CONDITIONS	25,000			Demolition & structure moving, site demolition.
EARTHWORK	157,102			Site clearing, earth moving, earthwork methods.
EXTERIOR IMPROVEMENTS	41,216			Bases, bollards & paving, wetlands, irrigation, planting, site furnishings, fencing.
UTILITIES	75,447			Water, sanitary sewerage, storm drainage, electrical.
TOTAL PROJECT COST	5,801,754			

UPDATED ESTIMATE TO FEBRUARY 2019: \$245.61 PER SQUARE FOOT

Regional Cost Trends
This project, updated to February 2019 in the selected cities of the United States.

EASTERN U.S.	Sq.Ft. Cost	Total Cost	CENTRAL U.S.	Sq.Ft. Cost	Total Cost	WESTERN U.S.	Sq.Ft. Cost	Total Cost
Atlanta, GA	\$286.03	\$7,107,443	Dallas, TX	\$276.70	\$6,875,678	Los Angeles, CA	\$369.97	\$9,193,323
Pittsburgh, PA	\$360.64	\$8,961,558	Kansas City, KS	\$373.08	\$9,270,577	Las Vegas, NV	\$338.88	\$8,420,774
New York, NY	\$460.13	\$11,443,712	Chicago, IL	\$388.62	\$9,656,851	Seattle, WA	\$369.97	\$9,193,323

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